Abstract

A first receiving unit typically receives a control frame in a narrowband channel. A communication data selection unit controls power saving of a second receiving unit performing reception in a UWB channel, based on the control frame. A communication data generation unit generates communication time reservation response information by adding information reporting a normal reception to the received request for communication time reservation, and transmits this information from transmitting units in the narrowband channel, so that a second receiving unit is set to an operating mode only during a time slot when UWB communication is performed, and use of the time slot for performing UWB communication is reported to the radio communication device which has made the communication request and the radio communication devices in the area where transmission is possible.